

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for forming nanostructures of semi-conductor material on a substrate of dielectric material by chemical vapour deposition (CVD), comprising characterised in that it comprises the following steps:

~~—a step of forming a stable nuclei on the substrate (12) ~~stable nuclei (14)~~ of a first semi-conductor material in the form of islands, by CVD from a precursor (11) of the first semi-conductor material chosen so that the dielectric material (12) accepts the formation of said nuclei (14),~~

~~—a step of forming nanostructures (16A, 16B) of a second semi-conductor material from the stable nuclei (14) of the first semi-conductor material, by CVD from a precursor (21) chosen to generate a selective deposition of the second semi-conductor material only on said nuclei (14).~~

2. (Original) A method according to claim 1 in which the first and second semi-conductor materials are silicon.

3. (Original) A method according to claim 1 in which the first semi-conductor material is silicon and the second semi-conductor material is germanium.

4. (Currently Amended) A method according to claim 1 in which the substrate of dielectric material (12) is chosen in such a way that it is as reactive as possible with the precursor (11) of the first semi-conductor material.

5. (Currently Amended) A method according to claim 1 ~~in which~~ wherein the substrate of dielectric material (12) ~~is chosen from among the group comprising~~ comprises an SiO₂ group, the SiO₂ group having with a high density of Si-OH groups on its surface, Si₃N₄, Al₂O₃ and HfO₂.

6. (Currently Amended) A method according to claim 1 ~~in which the step of~~ wherein forming a stable nuclei (14) of a first semi-conductor material is carried out for an exposure time chosen as a function of ~~the~~ a desired density of a nuclei.

7. (Currently Amended) A method according to claim 1 ~~in which the step of~~ wherein forming nanostructures (16A) of a second semi-conductor material is carried out for an exposure time chosen as a function of ~~the~~ a desired size of the nanostructures ~~(16B)~~.

8. (Currently Amended) A method according to claim 1 ~~in which said steps are carried out with~~ wherein the precursor of the first semi-conductor material and the precursor of the second semi-conductor material have a low partial pressure of precursor (11, 21).
9. (Currently Amended) A method according to claim 2 in which the precursor ~~(11)~~ of the first semi-conductor material is silane.
10. (Currently Amended) A method according to claim 9 ~~in which the formation wherein forming the stable~~ of nuclei (14) of the first semi-conductor material is carried out at a temperature between about 550 °C and 700 °C and with a low partial pressure of silane, less than around 133 Pa (1 Torr).
11. (Currently Amended) A method according to claim 9 in which the step of forming stable nuclei ~~(14)~~ of a first semi-conductor material being carried out at partial pressures less than around 1.33 Pa (10 mTorr), the exposure time of the substrate to the precursor ~~(11)~~ of the first semi-conductor material is less than 15 minutes.
12. (Currently Amended) A method according to claim 9 ~~in which the step of wherein~~ forming a stable nuclei (14) of the first semi-conductor material being carried

out at partial pressures less than around 133 Pa (1 Torr), the exposure time of the substrate to the precursor (11) of the first semi-conductor material is less than 1 minute.

13. (Currently Amended) A method according to claim 2 in which the precursor (21) of the second semi-conductor material is dichlorosilane.

14. (Currently Amended) A method according to claim 3 in which the precursor (21) of the second semi-conductor material is germane.

15. (Currently Amended) A method according to claim 13 in which the step of forming nanostructures (16A) is carried out at a temperature between about 300 °C and 1000 °C and with a partial pressure of precursor (21) less than around 133 Pa (1 Torr).

16. (Currently Amended) ~~Nanostructures formed by the A~~ method according to claim 1 ~~characterised in that~~ wherein the formed nanostructures are of homogeneous and a controlled size.

17. (Currently Amended) ~~Nanostructures~~ A method according to claim 16 further comprising doping the formed nanostructures ~~characterised in that they are doped by~~

~~with a co-deposition or by implantation with elements such as boron, phosphorous, arsenic or erbium.~~

18. (Currently Amended) ~~Nanostructures formed~~ A method according to claim 16 characterised in that they further comprising encapsulating the formed nanostructures ~~are encapsulated by~~ with a deposition of a dielectric.

19. (Original) A storage cell having a floating gate characterised in that said floating gate is formed of nanostructures according to claim 18.

20. (Currently Amended) A storage cell according to claim ~~19~~ 20 characterised in that it is a DOTFET.

21. (New) A method according to claim 16 further comprising doping the formed nanostructures by implantation with elements selected from the group consisting of boron, phosphorous, arsenic and erbium.

22. (New) A method according to claim 18 further comprising forming a floating gate from the formed nanostructures, wherein the floating gate is coupled to a storage cell.

23. (New) A method according to claim 22 wherein the storage cell is a DOTFET.